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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Eric Jensen

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Duane Morris LLP  
1667 K Street, N.W., Suite 700  
Washington, DC 20006

EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2618

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/899,128	<b>Applicant(s)</b> JENSEN, ERIC	
	<b>Examiner</b> Perez M. Angelica	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/11/2008 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 7, 17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Agostino et al. (Agostino, US006519452B1).

Regarding claims 1, 17 and 18, Agostino teaches of a method and apparatus for collecting and processing uplink received signal level data and geolocation data over a wireless system (columns 2 and 3, lines 12-15, 64-67 and 1-7), comprising the steps of: gathering signal strength data of received uplink signals of identified mobile units as measured by a cell site (columns 1, 2, 3 and 8, lines 38-40, 64-67, 1-3 and lines 44-48, respectively; where “as it has perceived” corresponds to measurements made by the BS, and “reverse link” and “short term reverse RSSI “ corresponds to radio signal sent from the MS and measured by the BS; column 4, lines 20-24, where data corresponding to identified MS is time-stamped); gathering geolocation location data corresponding to mobile units (columns 3 and 9, lines 1-3 and 41-45, respectively, e.g., “location data”); forming data pairs by identifying the gathered geolocation data and the gathered signal strength corresponding to a common identified mobile units and by selecting the geolocation data and the measured signal strength data received within sufficiently closed temporal proximity to a reference time stamp to identify data from the same mobile unit (columns 3 and 4, lines 55-67 and 1-34); generating a set of data pairs correlating measured signal strength values to specific geographic locations throughout the wireless system (figure 8, where to generate the map, data pairs of measured signal strength and location information about the mobile units are required).

Regarding claim 2, Agostino teaches all the limitations according to claim 1. Agostino further teaches where: the signal strength data is collected by measuring the signal strength of a signal received by a cell site, from a mobile wireless unit (columns

1, lines 38-40; where “as it has perceived” corresponds to measurements made by the BS).

Regarding claim 3, Agostino teaches all the limitations of claim 1. In addition, Tayloe teaches where the signal strength data is collected by measuring the signal strength of a signal received by a wireless mobile unit, from a cell site (column 8, lines 44-45, e.g. “Short Term Forward RSSI”).

Regarding claim 7, Agostino teaches teach all the limitations of claim 1. In addition, Agostino further teaches where the correlation includes matching the geolocation data with the signal strength data of a mobile unit based upon the receipt of data corresponding to the same mobile unit (columns 1 and 4, lines 50-66 and 20-24, where the measurements are made in real time).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-5, 8, 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agostino in view of Tayloe et al. (Tayloe, Patent No: 5,095,500).

Regarding claim 4, Agostino teaches all the limitations of claim 1.

Agostino does not specifically teach where: the geographic location data is determined by triangulation of said mobile unit with respect to a plurality of stationary cell site antennae.

In related art concerning cellular telephone diagnostic system, Tayloe teaches where the geographic location data is determined by triangulation of said mobile unit with respect to a plurality of stationary cell site antennae (column 8, lines 63-68).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Tayloe's triangulation method for measuring location as one of various methods for measuring location available.

Regarding claim 5, Agostino and Tayloe teach all the limitations of claim 1. Tayloe further teaches where the geographic location data is determined with reference to a set of global positioning satellites (column 9, line 4).

Regarding claim 8, Agostino and Tayloe teach all the limitations of claim 1. Tayloe further teaches of analyzing the set of data pairs to evaluate the effective RF propagation within the wireless system (column 6, lines 59-61; where the evaluated RF propagation leads to the necessary adjustments in the RF planning).

Regarding claim 11, Agostino teaches all the limitations of claim 1. Tayloe further teaches of gathering drop call incident data from the system; and identifying the geolocation corresponding to the dropped call incidents (column 7, lines 49-59).

Regarding claim 12, Agostino and Tayloe teach all the limitations of claim 11. Tayloe further teaches of generating a set of data points correlating drop call incidents

with geolocation of occurrence (column 7, lines 49-59; where the correlation provides the information to adjust the electromagnetic coverage of the system).

Regarding claim 13, Agostino and Tayloe teach all the limitations of claim 12. Tayloe further teaches of analyzing the drop call geolocation data set to determine an effective implementation for addressing dropped calls (column 7, lines 51-59).

Regarding claim 14, Agostino teaches all the limitations of claim 1. Tayloe further teaches of gathering blocked call incident data from the system; and identifying the geolocation corresponding to said blocked call incidents (column 4, lines 48-50, column 5, lines 42-52 and column 8, lines 24-35).

Regarding claim 15, Agostino and Tayloe teach all the limitations of claim 14. In addition, Tayloe further teaches of generating a set of data points correlating blocked call incidents with geolocation of occurrence (column 4, lines 61-67).

Regarding claim 16, Agostino and Tayloe teach all the limitations of claim 15. In addition, Tayloe teaches of analyzing the blocked call geolocation data set to determine an effective implementation for addressing blocked calls (column 8, lines 36-49 and column 5, lines 50-52).

6. Claims 9 -10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agostino in view of Tayloe, and further in view of Montoya (Montoya, Alexander John; US Patent No: 6,400,943).

Regarding claim 9, Agostino teaches all the limitations of claim 1. Tayloe further teaches of identifying the cell site, which gathered each signal strength data

measurement corresponding to each geolocation within the wireless system (column 2, lines 49-65 and figures 2, 3 and 4).

Montoya further teaches of determining the identified cell site likely to receive a signal from a mobile unit at each identified geolocation within the wireless system (column 5, lines 9-21; where the location code that identifies helps to decide what base station corresponds to the identified location).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Tayloe's, Manabe's and Sheffield's gathered location data and gathered strength data corresponding to the same mobil unit with Montoya's the identified cells in order to maintain accurate record of the data.

Regarding claim 10, Agostino, Tayloe and Montoya teach all the limitations of claim 9. Montoya further teaches of redefining the projected distribution of likely server cell sites within the wireless system based upon the determination of identified likely cell sites (column 8 lines, 11-17).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-5, 7-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-



7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

/P. M. A./  
Examiner, Art Unit 2618

April 7, 2008

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618